



*U.S. Department of Energy
and the
National Science Foundation*



July 17, 2006

Professor Robert E. Tribble
Chair, DOE/NSF Nuclear Science Advisory Committee
Cyclotron Institute
Texas A&M University
College Station, TX 77843

Dear Professor Tribble:

This letter requests that the Department of Energy (DOE)/National Science Foundation (NSF) Nuclear Science Advisory Committee (NSAC) establish a task force to perform an evaluation of the scientific "reach" and technical options for the development of a world-class facility in the United States for rare isotope beam studies within the funding envelope described below, and in the context of existing and planned research capabilities world-wide.

The technical and scientific capabilities of the proposed Rare Isotope Accelerator (RIA), as well as cost (~\$1,100 Million), have been refined over the years. Although the DOE has made the decision not to proceed with the construction of RIA as originally envisioned, the Department continues to believe that a facility for research with rare isotopes would add significantly to the Nation's scientific portfolio and is needed to maintain a leadership role in this area of nuclear physics. A modified RIA that focuses on capabilities which would make it unique in the world and would complement the rare isotope capabilities elsewhere will cost less. In the context of the projected out-year budget for the Office of Science, funding is possible to start design and construction of a rare isotope beam facility that is up to half the cost of RIA (Actual Year Dollars) early in the next decade. For the Department to proceed on a schedule that initiates project engineering and design in FY 2011 and construction soon after, the scientific and technical capabilities for such a facility would need to be defined in FY 2007.

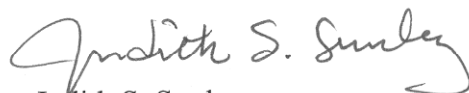
The results of this study should determine whether a forefront facility that will produce outstanding science in an international context within the suggested funding envelope can be defined, and if so, should identify the best option(s) for this facility. The report should contain sufficient details of the scientific capabilities and reach of the facility to inform the scientific community and NSAC in their development of the Long Range Plan, and sufficient technical detail so as to provide the guidelines to define such a facility in a request for proposals.

Please submit your final report to the DOE and the NSF by the end of March 2007. We realize that the development of this report during the period that NSAC is embarking on its long range planning exercise introduces an additional burden; however, it is believed that the information and guidance that emerges from this exercise on the requested timetable will be valuable to both the agencies and NSAC in its planning exercise.

Sincerely,



Dennis Kovar
Associate Director of the Office of Science
for Nuclear Physics
Department of Energy



Judith S. Sunley
Acting Assistant Director
Mathematical and Physical Sciences
National Science Foundation